Preparing Your Home for Disasters



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How to Secure Your Furniture

You must secure the contents of your home or office to reduce hazards during a disaster. You should secure anything heavy enough to hurt you if it falls on you. The following are steps should be taken to secure your possessions.

Anchor Your Furniture

Secure the tops of all top-heavy furniture to the wall, such as bookcases and file cabinets. Be sure to anchor to a stud, not just to the plasterboard. Flexible fasteners such as nylon straps allow tall objects to sway without falling over, reducing the strain on the studs.

Secure Tabletop Objects

- TVs, stereos, computers, lamps and chinaware can be secured with buckles and safety straps (thumb lock) or earthquake safety mat material that can be purchased from your local disaster supply center. These materials allow for easy movement when needed but will provide stability when the ground starts to shake.
- Glass and pottery objects can be secured with nondrying putty or microcrystalline wax.

Secure Overhead Objects

- Ceiling lights and fans should be supported with a cable bolted to the ceiling joist. The cable should have enough slack to allow it to sway.
- Framed pictures, especially glass-covered, should be hung from closed hooks so that they can't bounce off. Only soft art, such as tapestries, should be placed over beds and sofas.
- Hanging plants should be hung with closed hooks, so as not to become projectiles when there is ground movement.

Secure Items in the Kitchen

- Use childproof latches, hook and eye latches or positive catch latches (such as those found on boats) to secure your cabinet doors.
- Make sure your gas appliances have flexible connectors to reduce the risk of fire.
- Secure your refrigerator to prevent movement.

Protect Yourself From Broken Glass

- Replace strategic windows with ones made from safety glass or cover them with strong shatterresistant film. Be sure you use safety film and not just a solar film.
- Move furniture away from windows (especially in the bedroom) to prevent injury from shattered glass.
- Keep a pair of shoes under your bed. In the event of disaster you will be able to move about your home in safety.

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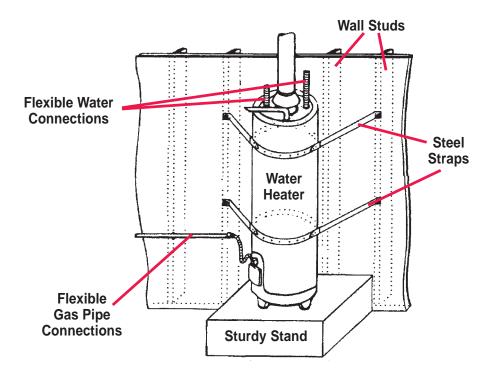
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How to Secure Your Water Heater

Secure your water heater to minimize damage during a disaster.



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Securing a Water Heater

- Mark your water heater at the front center, about one-third of the way down from the top and approximately one-third of the way up from the bottom.
- Ensure that the bottom mark is at least 4 inches above the water controls.
- Secure the water heater with a 16to 20-gauge, pre-drilled steel strap.

- If you place the water heater on a pedestal, you must secure the pedestal to the wall or floor to keep it from moving out from under the water heater during an earthquake.
- For more information on securing your water heater, contact your local emergency management office or utility.

Getting Water From A Water Heater

The water heater, if strapped properly, can be used as a backup source of drinking water in addition to the water you have already stored for emergencies.

- To get water out of your water heater when the water is turned off, you will need to turn off the gas or electric supply to the heater.
- Open a faucet located in the highest point of your home and then open the faucet at the bottom of the water heater. This allows the water to gravity feed from the tank.
- The water that first comes from the tank may be full of rust and other deposits. This is normal for a water heater that has been in a home for a few years. Discard the discolored water. When the water becomes clear, it should be safe to drink.
- If there is any question as to water purity purify it.



Preparing for Landslides and Mud Flows

Landslide and mudflows usually strike without warning. The force of rocks, soil, or other debris moving down a slope can devastate anything in its path. Take the following steps to be ready.

Before a landslide

- Get a ground assessment of your property.
- Your county geologist or county planning department may have specific information on areas vulnerable to land sliding.
 Consult a professional geotechnical expert for opinions and advice on landslide problems and on corrective measures you can take.

Insurance

Mudflow is covered by flood insurance policies from the National Flood Insurance Program. Flood insurance can be purchased through a local insurance agency.

Minimize home hazards

- Plant ground cover on slopes and build retaining walls.
- In mudflow areas, build channels or deflection walls to direct the flow around buildings.

Remember: If you build walls to divert debris flow and the flow lands on a neighbor's property, you may be liable for damages.

Make evacuation plans

- Plan at least two evacuation routes since roads may become blocked or closed.
- Develop an emergency communication plan.
- In case family members are separated from one another during a landslide or mudflow that is (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.
- Ask an out-of-state relative or friend to serve as the "out-of-area" contact. After a disaster it's often easily to call long distance. Make sure everyone knows the name, address and phone number for the contact person.

Learn to recognize the landslide warning sings

- Doors or windows stick or jam for the first time.
- New cracks appear in plaster, tile, brick, or foundations.
- Outside walls, walks, or stairs begin pulling away from the building.
- Slowly developing, widening cracks appear on the ground or on paved areas such as streets or driveways.
- Underground utility lines break.
- Bulging ground appears at the base of a slope.
- Water breaks through the ground surface in new locations.
- Fences, retaining walls, utility poles, or tress tilt or move.

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Preparing for Landslides and Mud Flows (continued)

■ You hear a faint rumbling sound that increases in volume as the landslide nears. The ground slopes downward in one specific direction and may begin shifting in that direction under your feet.

Sinkholes

A sinkhole occurs when groundwater dissolves a vulnerable land surface, such as limestone, causing the land surface to collapse from a lack of support.

During a landslide:

If inside a building:

- Stay inside.
- Take cover under a desk, table, or other piece of sturdy furniture.

If outdoors:

- Try and get out of the path of the landslide or mudflow.
- Run to the nearest high ground in a direction away from the path.

- If rocks and other debris are approaching, run for the nearest shelter such as a group of trees or a building.
- If escape is not possible, curl into a tight ball and protect your head.

After a landslide:

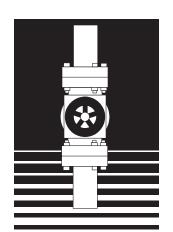
- Stay away from the slide area. There may be danger of additional slides.
- Check for injured and trapped persons near the slide area.
 Give first aid if trained.
- Remember to help your neighbors who may require special assistance – infants, elderly people, and people with disabilities.
- Listen to a battery-operated radio or television for the latest emergency information.
- Remember that flooding may occur after a mudflow or a landslide.

- Check for damaged utility lines. Report any damage to the utility company.
- Check the building foundation, chimney, and surrounding land for damage.
- Replant damaged ground as soon as possible since erosion caused by loss of ground cover can lead to flash flooding.
- Seek the advice of geotechnical expert for evaluating landslide hazards or designing corrective techniques to reduce landslide risk.

Mitigation

Mitigation includes any activities that prevent an emergency, reduce the chance of an emergency happening, or lessen the damaging effects of unavoidable emergencies. Investing in preventive mitigation steps now such as planting ground cover (low growing plants) on slopes, or installing flexible pipe fitting

to avoid gas or water leaks, will help reduce the impact of landslides and mudflows in the future. For more information on mitigation, contact your local emergency management office.



It is best to learn how to turn off household utilities before disaster strikes.

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Turning Off the Utilities

When disaster strikes, it often affects one or more of the utility systems in your home. Therefore, it is important to know where the main controls are located and when and how to turn them off.

Electricity

- Locate your main electrical switch or fuse panel, and learn how to turn off the electrical power system.
- If a generator is used as a backup power supply, remember to follow the manufacturer's instructions.

 Connect lights and appliances directly to the generator and not to the electrical system.

Water

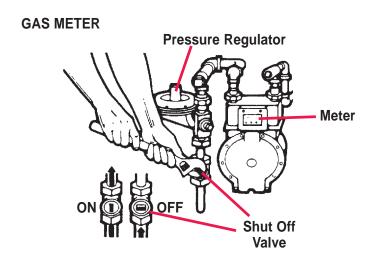
- Turn off water at the main meter or at the water main leading into the house. This will prevent contaminated water from entering your water heater and plumbing.
- Turn off the valve turn to the right. This will require a special valve wrench, available from a hardware store. Make sure you have the tool readily available.

Gas Meter (illustration below)

- Locate your gas meter and valve.
- Have a wrench immediately available for turning off the meter.
- If you smell natural gas, evacuate immediately. Do not use matches, lighters, open flame appliances, or operate electrical switches. Sparks could ignite gas causing an explosion.
- Shut off gas ONLY if you smell gas or hear a hissing noise. Let the gas company turn the gas back on.

Sewer System

Make sure your sewer system is functioning properly before using it. This will prevent the contamination of your home and possibly the drinking water supply.





Preparing for Household Fires

Protecting Against Fires

- Make sure your house number is clearly visible and fire trucks can reach your home.
- Install smoke detectors outside all sleeping areas or in each bedroom and on every level of your home, including the basement.
- Check smoke detectors on a regular basis and replace the batteries twice yearly.
- Consider installing a residential sprinkler system.
- Know the location of all exits. If you live in an apartment, count the number of doorways between your apartment and the two nearest exits. Be familiar with all exits, including the windows.
- Plan your escape. Know two ways out of every room in case smoke or flames block your primary exit.
- Choose a meeting place outside the home, and be sure all family members are accounted for. If someone is missing, let the fire

- department know. Do not go back inside. Practice your plan with all family members.
- Escape plans and exit drills will help ensure that you can get out quickly when there is no time for mistakes.
- Sleep with your bedroom door closed.
- Keep folding/chain style ladders stored in each upstairs bedroom.
- Mark bedroom windows outside of the building of children or others who may not be able to self-rescue.
- Learn how to turn off gas and electricity in an emergency.
- Install A-B-C type fire extinguishers; teach family members how to use them.

If Fire Strikes

- If there is a fire evacuate and call 9-1-1 from a neighbor's house.
- Never use water on an electrical fire.
- If caught in smoke drop to your hands and knees and crawl; breathe shallowly through you nose and use your blouse, shirt or jacket as a filter.
- If you are forced to advance through flames, hold your breath, move quickly, cover your head and hair, keep your head down and close your eyes as much as possible.
- Smother oil and grease fires in the kitchen with baking soda or salt, or put a lid over the flame if it is burning in a pan.
- If your clothes catch fire, "Stop, Drop and Roll" until the fire is out.
- If you are in a room and cannot escape, leave the door closed, stay low to the floor, and hang a white or light-colored sheet outside the window.

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